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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,168

01/19/2006

Shigeyuki Horie

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7250

32172 7590 07/25/2007

DICKSTEIN SHAPIRO LLP
1177 AVENUE OF THE AMERICAS (6TH AVENUE)
NEW YORK, NY 10036-2714

EXAMINER

HA, NGUYEN T

ART UNIT

PAPER NUMBER

2831

MAIL DATE

DELIVERY MODE

07/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,168

Applicant(s)

HORIE ET AL.

Examiner

Nguyen T. Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/19/2006 & 3/6/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-40 is/are allowed.
- 6) ☒ Claim(s) 23-31 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 0106.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The examiner acknowledges the applicant's submission of the amendment dated 3/6/2007. At this point, claims 1-22 have been canceled, claims 23-40 have been added. Thus, claims 23-40 are pending in the instant application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 23-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshii et al. (US 6,400,553).

Regarding claims 23-25, 28 Yoshii et al. disclose a monolithic ceramic electronic component comprising a first external electrode (14), a second external electrode (16), and a monolithic ceramic element (2) including an internal electrode (8, 10), the first and second external electrodes being disposed on both end faces of the monolithic ceramic element (figure 1), wherein each external electrode comprises a sintered electrode layer (142, 162) disposed on the monolithic ceramic element and which has oxide exposed at surface portions of the sintered electrode distant from the ceramic element, an intermediate electrode plated layers (144, 164) disposed on the sintered electrode layer, and a plated layer (146, 166) disposed on the intermediate electroplated layer, and wherein the exposed oxide surface has a metal disposed thereon, the metal being an

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electroplating seed for forming the intermediate electroplated layers (column 5, lines 45-67, and column 6, lines 1-28).

Regarding claims 26, 29 Yoshii et al. disclose the intermediated electroplated layer comprises plated Ni (column 6, lines 5-9).

Regarding claim 27, 30, Yoshii et al. further disclose the seed metal comprises Sn or Sn alloy (column 1, lines 32-34).

Regarding claim 31, Yoshii et al. disclose the intermediate electroplated layer is formed on the sintered electrode layer by electroplating in a composition comprising Ni, and the plated layer is formed by plating a composition comprising tin on the intermediate electrodeplated layer (column 6, lines 5-15).

Allowable Subject Matter

4. Claim 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claim 32, the prior art alone or in combination does not teach the limitation of a seed metal is deposited by barrel plating the sintered monolithic capacitor with media having the seed metal on the surface thereof at a time and rotational speed such that the product of the time in minutes and speed in rpm is at least 150.

Claims 33-40 are allowed.

The following is an examiner's statement of reasons for allowance:

With respect to claim 33, the prior art alone or in combination does not teach the limitation of a method for manufacturing monolithic ceramic electronic component comprising the steps of:

- providing a conductive paste containing oxides on separated surfaces of the monolithic ceramic element and then heat-treating the paste;
- depositing metal on surface regions of the oxides that are exposed from surface portions of the sintered electrode layer, the metal being an electroplating seed for forming an intermediate electrodeplated layer covering the exposed surface regions of the oxide;

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation Relevant of Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Park et al. (US 6,185,087) disclose multilayer ceramic chip capacitor with high reliability compatible with nickel electrodes.
- b. Arashi et al. (US 6,160,472) disclose multilayer varistor.
- c. Sano et al. (US 5,877,934) disclose ceramic composition and multilayer ceramic capacitor made therefrom.

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d. Sanada (US 5,561,587) discloses conductive paste and multilayer ceramic capacitor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Ha whose telephone number is 571-272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGUYEN T. HA
PRIMARY EXAMINER

NH

July 18, 2007